

May 18, 2004

William Taylor
Pierce Atwood
One Monument Square
Portland, ME 04101-1110

RE: Gulf Island Pond Oxygenation Project (GIPOP) Engineering Study

Dear Bill:

This is to follow up our discussion at the Gulf Island Pond (GIP) stakeholders meeting on May 12, 2004 regarding the need for an engineering study of additional mechanical aeration of GIP.

As noted in the Androscoggin River Modeling Report (June 2002), the Androscoggin River Alternative Analysis for TMDL (Draft February 2003), the GIP Implementation Plan, and discussions at various GIP stakeholder meetings, additional mechanical aeration of GIP is a critical component of the overall plan to bring GIP into attainment.

The current model indicates that a total of 150,000 pounds per day (ppd) to 210,000 ppd of oxygen must be generated (based on current transfer efficiency), in combination with additional controls at the mills, to bring GIP into attainment for dissolved oxygen. The Department recognizes that the efficiency of the oxygen diffuser may be able to be improved, and that the actual amount of oxygen transferred to the river is the critical factor, so that the oxygen requirements could be less than specified above. (For example, 210,000 ppd = 70,000 ppd transferred into the river at 33% efficiency but 140,000 ppd = 70,000 ppd transferred into river at 50% efficiency.)

In addition, the model indicates that attainment of dissolved oxygen criteria everywhere in GIP can not be attained with a single point injection system at its current location. Multiple point injection systems are needed, unless there is sufficient proof to show that the attainment can be met using a different configuration.

I am requesting the GIPOP Partnership submit to the Department by September 1, 2004 an engineering study that addresses the following:

- The technical feasibility and cost of adding an additional system, or systems, at Turner Bridge and Lower Narrows.
- The technical feasibility and cost of transferring 40,000; 50,000; 60,000; and 70,000 ppd oxygen to the river at its current location.
- The technical feasibility and cost of transferring the above amounts split among two injection sites (at Turner Bridge or Lower Narrows).

In addition to the engineering study, the GIPOP Partnership should submit to the Department by September 1, 2004, a report per CFR 125.3.f, that reaffirms that the use of mechanical in-stream aeration is the preferred environmental and economic method to achieve the standards rather than alternatives such as advanced waste treatment, recycling and reuse, land disposal, changes in operating methods, and other available methods. While a report was originally submitted to justify the installation of the existing GIPOP, we need an updated report to justify the use of additional aeration through the existing system or any additional systems.

The Department is certainly open to further discussions on the implementation of any plan for additional aeration in terms of timing, location and incremental adjustments to oxygen loading, after we receive the reports.

Sincerely,

DAWN GALLAGHER

PC: Andrew Fisk, DEP